

Amendments to the Claims:

Please amend claims 1, 2, 6 and 9. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A primary cultured adipocyte for gene therapy, wherein the adipocyte **is isolated and established from adipose tissue and** stably maintains a foreign **DNA** gene encoding a protein that is secreted outside of a cell, **and wherein the DNA is operably linked to a promoter sequence.**

2. (Currently Amended) The adipocyte of claim 1, wherein the **DNA** gene is transferred to the cell by a retroviral vector or adeno-associated viral vector.

3. (Original) The adipocyte of claim 1, which has the ability to significantly express the protein in vivo for at least 20 days.

4. (Original) The adipocyte of claim 1, which is used to release the protein into the blood flow.

5. (Previously presented) The adipocyte of claim 1, wherein the protein is insulin or glucagon-like peptide 1 (GLP-1).

6. (Currently Amended) A method of producing an adipocyte for gene therapy, wherein the method comprises the steps of:

- (1) **isolating adipocytes and establishing a primary culture** ~~primary~~ culturing an adipocyte; and
- (2) transferring, and then stably **maintaining in the genome** holding a foreign **DNA** gene **operably linked to a promoter sequence and** encoding a protein that is secreted outside of the cell.

7. (Original) The method of claim 6, wherein the foreign gene is transferred by a retroviral vector or adeno-associated viral vector.

8. (Previously presented) An adipocyte for gene therapy, which is produced by the method of claim 6.

9. (Currently Amended) An implant composition for gene therapy, wherein the composition comprises a primary cultured adipocyte, which **is isolated and established from adipose tissue and** stably **maintains in the genome** holds a foreign **DNA gene** encoding a protein that is secreted outside of the cell, and a pharmaceutically acceptable carrier, **wherein the DNA is operably linked to a promoter sequence.**

10. (Original) The implant composition of claim 9, which further comprises an extracellular matrix component.

11. (Original) The implant composition of claim 9, which further comprises an angiogenesis factor.

12.-16 (Cancelled)

17. (Previously presented) An adipocyte for gene therapy, which is produced by the method of claim 7.